

Amendments to the Specification

Please replace paragraph 3 beginning on line 14 of page 3 with the following amended paragraph:

Subregion as used herein ~~within the meaning of claim 1~~ can also be a region to be reconstructed, which comprises the entire object or just a portion of the object.

Please replace paragraph 4 beginning on line 16 of page 3 with the following amended paragraph:

~~Claims 2 and 3 described~~ The description herein includes methods in which each two consecutive periods form a period pair and a first intermediate image of a subregion is reconstructed exclusively using measured values whose acquisition instants lie in the time interval of the earlier period of a period pair, and a second intermediate image of the same subregion is reconstructed exclusively using measured values whose acquisition instants lie in the time interval of the later period. The intermediate images are compared with the similarity measure. The reconstruction of one of the intermediate images is now carried out with modified, especially shifted, time intervals until a break-off criterion dependent on the similarity measure is satisfied. This leads to a further reduction in movement artifacts.

Please replace paragraph 5 beginning on line 25 of page 3 with the following amended paragraph:

~~Claims 4 and 5 Also described herein is~~ describe a break-off criterion and a similarity measure, which produce a reconstructed CT image of very good quality.

Please replace paragraph 6 beginning on line 27 of page 3 with the following amended paragraph:

In some of the embodiments ~~as claimed in claim 6~~, each measured value is weighted before the reconstruction, which leads to a further improvement in the image quality.

Application No. 10/596,151
Amdt. Dated: July 1, 2008
Reply to Office Action Dated: April 3, 2008

Please replace paragraph 7 beginning on line 29 of page 3 with the following amended paragraph:

~~Claims 7 and 8~~ Also described are ~~describe~~ computer tomography methods in which use is made of a filtered back-projection respectively a lower three-dimensional resolution in the reconstruction of the intermediate images than in the reconstruction of the CT image, thus reducing the computing expenditure.

Please replace paragraph 1 beginning on line 1 of page 4 with the following amended paragraph:

~~Claims 9 and 10 describe~~ Some embodiments of the method according to the invention that use an electrocardiogram as movement signal. This leads to a CT image of a beating heart with only few movement artifacts.

Please replace paragraph 2 beginning on line 4 of page 4 with the following amended paragraph:

A computer tomograph for carrying out the method ~~according to the invention is~~ described herein ~~in claim 11~~.

Please replace paragraph 3 beginning on line 6 of page 4 with the following amended paragraph:

Another embodiment ~~Claim 12~~ defines a computer program for controlling a computer tomograph ~~as claimed in claim 11~~.